



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/528,991

03/24/2005

Susumu Murata

123216

6386

25944 7590 03/19/2007  
OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER

MARINI, MATTHEW G

ART UNIT

PAPER NUMBER

2854

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

03/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/528,991	Applicant(s) MURATA ET AL.	
	Examiner Matthew G. Marini	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/10/07 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

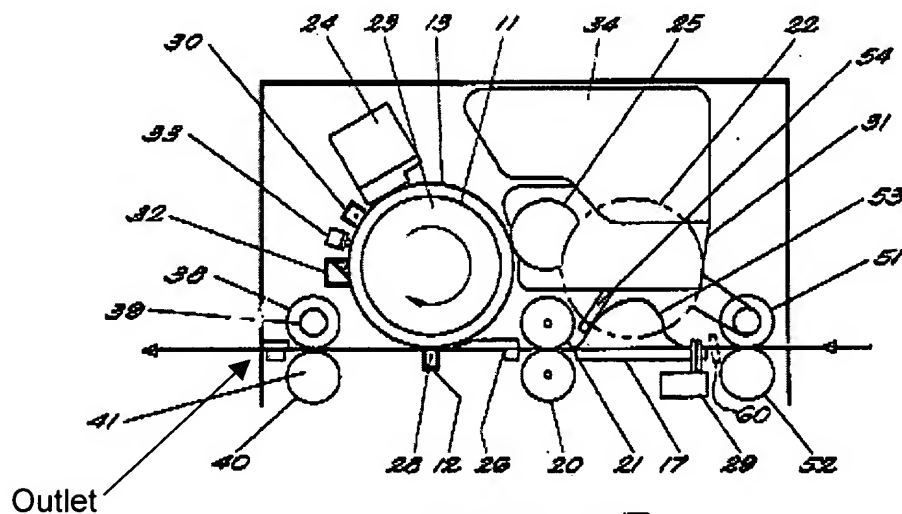
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15-20, 22, and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Estabrooks (5,768,675).

As to Claim 15, Estabrooks teaches in Fig. 17 a tape-like object feeding device, for feeding a tape-like object, 14, comprising: a feeding mechanism, rollers, 20, 21, 51 and 52, that feed the tape-like object, toward an outlet, labeled below in figure 1a; a cutting mechanism, 29, that cuts the tape-like object, 14, fed by the feeding mechanism, rollers 20, 21, 51, and 52; an ejection roller, 40, placed on the outlet side after the cutting operation has occurred, Col. 10 lines 36-43, of the cutting mechanisms, 29, for ejecting the tape-like object, 14, cut off by the cutting mechanism, 29, through the outlet, labeled in figure 1a, by revolving while making sandwiching the web between roller, 39,

wherein the ejection roller, 40, is operated independently of the cutting mechanism, 29, by motor, 4, Col. 7 lines 54-57; and a controller, Col. 10 lines 46-49, which controls the revolving timing of the ejection roller, 40, in ejecting the tape-like object depending on a "process" feeding length, Col. 10 lines 36-56, of the tape-like object by the feeding mechanism, rollers, 20, 21, 51 and 52, after the tape-like object has been severed, Col. 10 lines 36-42.



**FIG. 17**

Figure 1a

As to Claim 16, Estabrooks teaches a tape-like object-feeding device in Fig. 17, wherein a driver, motor 22, for driving the feeding mechanism, rollers, 20, 21, 51 and 52, and a driver, 41, for driving the ejection roller, 40, are provided separately and independently, as seen above in figure 1a.

As to Claim 17, Estabrooks teaches in Fig. 17 a label tape printing device for printing on a label tape, Col. 1 lines 4-11, as the tape-like object, 14, comprising: the tape-like object feeding device, described above in claim 1; and an image formation

unit, 13, placed on an upstream side of the cutting mechanism, 29, for forming an image on the label tape, 14.

As to Claim 18, Estabrooks teaches in Fig. 17, a tape-like object feeding device, for feeding a tape-like object, 14, comprising: a feeding mechanism, rollers, 20, 21, 51 and 52, that feed the tape-like object, toward an outlet, labeled above in figure 1a; a cutting mechanism, 29, that cuts the tape-like object, 14, fed by the feeding mechanism, rollers 20, 21, 51, and 52; an ejection roller, 40, placed on the outlet side after the cutting operation has occurred, Col. 10 lines 36-43, of the cutting mechanisms, 29, for ejecting the tape-like object, 14, cut off by the cutting mechanism, 29, through the outlet, labeled in figure 1a, by revolving while making sandwiching the web between roller, 39, wherein the ejection roller, 40, is operated independently of the cutting mechanism, 29, by motor, 4, Col. 7 lines 54-57; and a controller, Col. 10 lines 46-49, which executes driving control of the ejection roller, 40, in ejecting the tape-like object depending on a "process" feeding length, Col. 10 lines 36-56, of the tape-like object by the feeding mechanism, rollers, 20, 21, 51 and 52, after the tape-like object has been severed, Col. 10 lines 36-42.

As to Claim 19, Estabrooks teaches a tape-like object-feeding device in Fig. 17 where the type of the tape-like object, includes a laminate structure similar to a stricker, Col 1 lines 4-11 of the tape-like object, 14.

As to Claim 20, Estabrooks teaches a tape-like object feeding device of Fig. 17 where the controller, Col. 10 lines 46-49, changes control, regarding revolving timing of the ejection roller, 40, depending on the "process" feeding length, Col. 10 lines 36-56, of

the tape-like object, 14, by the feeding mechanism, rollers 20, 21, 51 and 52, at the point when the tape-like object is cut off by the cutting mechanism, 29.

As to Claim 22, Estabrooks teaches a tape-like object feeding device in Fig. 17 where the controller, Col. 10 lines 46-49 includes: a first driver, 41, that drives the ejection roller, 40; and a second driver, 22, that drives the feeding mechanism, rollers 20, 21, 51 and 52, wherein the ejection roller, 40, and the feeding mechanism, rollers 20, 21, 51 and 52, are controlled independently by driving the first and second drivers, 41 and 22, separately, Col. 10 lines 36-56.

As to Claim 24, Estabrooks teaches a tape-like object feeding device, in Fig. 17, where the controller, Col. 10 lines 46-49, includes a calculating system, Col. 10 lines 46-46-52, which calculates the "process" feeding length of the tape-like object, 14, by the feeding mechanism, rollers 20, 21, at the point when the tape-like object, 53, is cut off by the cutting mechanism, 29, based on information on contents of printing on the tape-like object, Col. 10 lines 46-52.

As to Claim 26, Estabrooks teaches a tape-like object-feeding device, in Fig. 17, where the tape-like object is a label tape, Col. 1 lines 4-11.

As to Claim 27, Estabrooks teaches in Fig. 17, a printing device comprising: a feeding mechanism, rollers, 20, 21, 51 and 52, that feed the tape-like object, toward an outlet, labeled above in figure 1a; a cutting mechanism, 29, that cuts the tape-like object, 14, fed by the feeding mechanism, rollers 20, 21, 51, and 52; an ejection roller, 40, placed on the outlet side after the cutting operation has occurred, Col. 10 lines 36-43, of the cutting mechanisms, 29, for ejecting the tape-like object, 14, cut off by the

Art Unit: 2854

cutting mechanism, 29, through the outlet, labeled in figure 1a, by revolving while making sandwiching the web between roller, 39, wherein the ejection roller, 40, is operated independently of the cutting mechanism, 29, by motor, 4, Col. 7 lines 54-57; an image formation unit, 24, placed on an upstream side of the cutting mechanism, 29, in the feeding path for forming an image on the tape-like object, 14; and a controller, Col. 10 lines 46-49, which executes driving control of the ejection roller, 40, in ejecting the tape-like object depending on a "process" feeding length, Col. 10 lines 36-56, of the tape-like object by the feeding mechanism, rollers, 20, 21, 51 and 52, after the tape-like object has been severed, Col. 10 lines 36-42.

As to Claim 28, Estabrooks teaches the printing device in Fig. 17 where the controller, Col. 10 lines 46-49, executes the driving control of the ejection roller, 40, in the ejection of the tape-like object, 14, which has been cut off, further considering the size of the image generated by the image formation unit, 24, Col. 10 lines 46-49.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Estabrooks (5,768,675) in view of Kano (5,855,441).

Estabrooks teaches all that is claimed, as discussed in the above rejection of Claim 18, except a tape-like object-feeding device further comprising a detector that detects the type of the tape-like object.

Kano teaches in Col. 4 lines 4-6, a cassette identification sensor, which identifies the type of cassette attached. It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the sensor of Kano into Estabrooks because it would allow the ability to store different print formats depending on the type of cassette used without user input, Fig. 2.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Estabrooks (5,768,675) in view of Goto et al. (6,408,750).

As to Claim 25, Estabrooks teaches all that is claimed in the above rejection of claim 18, except Estabrooks remains silent regarding how the controller, Col. 10 lines 46-49, counts the rotations of the rollers, 20, 21, 51 and 52. Goto et al. teaches a rotary sensor, 211, in Fig. 12 used to count the number of rotations a roller, 210, makes. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Estabrooks to include the rotary sensor, 211, of Goto et al. because Goto et al. teaches that the sensor, 211, is used to count the number of rotations a roller makes, allowing a controller to measure an amount at which the recording material is fed, Col. 17 lines 34-37.

### ***Conclusion***



Art Unit: 2854

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Marini whose telephone number is (571)-272-2676. The examiner can normally be reached on Monday-Friday 8:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571)-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew Marini



03/08/07



Ren Yan  
Primary Examiner